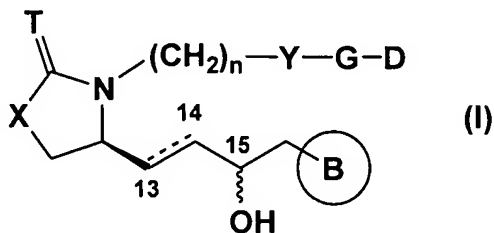



AMENDMENTS TO THE CLAIMS


This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A compound represented by formula (I)



wherein  is a single bond or a double bond,

 is α -configuration, β -configuration or a voluntary mixture of α -configuration

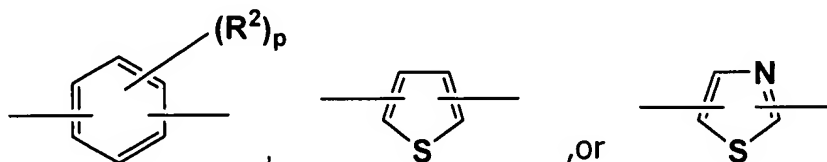
and β -configuration,

D is $-\text{COOR}^1$ or tetrazoryl,

R^1 is hydrogen or C1-4 alkyl,

G is ringA or C1-4 alkylene,

ringA is



R^2 is a halogen atom, C1-4 alkyl or C1-4 alkoxy,

p is 0 or an integer of 1-4,

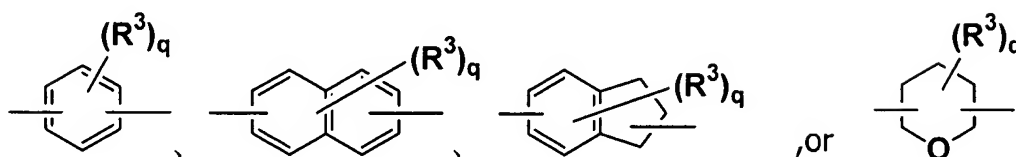
when p is 2 or more, plural R^{2i} 's are the same or different,

Y is a single bond or -S-,

T is oxygen or sulfur,

X is -CH₂-, -O- or -S-,

ringB is C3-7 cycloalkyl optionally substituted,



wherein R^3 is (1) a halogen atom, (2) C1-4 alkyl optionally substituted with 1-5 of halogen atom(s), (3) C1-4 alkoxy optionally substituted with 1-5 of halogen atom(s), (4) C1-4 alkyl substituted with C1-4 alkoxy, (5) phenyl or (6) 3- to 15- membered mono-, bi- or tri-heterocyclic aryl containing 1 to 4 hetero atom(s) selected from the group consisting of oxygen, nitrogen and sulfur atom(s) which may be partially or fully saturated, and (5) phenyl or (6) heterocyclic aryl in R^3 is optionally substituted with 1-3 of (a) halogen atom(s), (b) C1-4 alkyl, (c) C1-4 alkoxy and/or (d) nitro,

q is 0 or an integer of 1-5,

when q is 2 or more, plural R^3 's are the same or different, and

n is an integer of 1-4,

a salt thereof, a solvate thereof, a cyclodextrin clathrate thereof, or a prodrug thereof.

2. (currently amended): The compound according to claim 1, which is selected from the group consisting of:

- (1) 4-[(2-{(4S)-4-[(1E,3S)-4-(3-ethylphenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (2) 4-[(2-{(4S)-4-[(1E,3S)-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (3) ~~4-[(2-((4S)-4-[(1E,3S)-4-[4-fluoro-3-(trifluoromethyl)phenyl]-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid~~ 4-[(2-((4S)-4-[(1E,3S)-4-[4-fluoro-3-(trifluoromethyl)phenyl]-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (4) ~~4-[(2-{(4S)-4-[(1E,3S)-4-(3,5-difluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid~~ 4-[(2-{(4S)-4-[(1E,3S)-4-(3,5-difluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (5) 4-[(2-{(4S)-4-[(1E,3S)-3-hydroxy-4-(3-propylphenyl)but-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (6) ~~4-[(2-((4S)-4-[(1E,3S)-4-(3-ethyl-4-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid~~ 4-[(2-{(4S)-4-[(1E,3S)-4-(3-ethyl-4-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid,
- (7) ~~4-[(2-((4S)-4-[(1E,3S)-4-(3,4-difluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid~~ 4-[(2-{(4S)-4-[(1E,3S)-4-(3,4-difluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl}ethyl)sulfanyl]butanoic acid.

- (8) ~~4-[[2-((4S)-4-((1E,3S)-3-hydroxy-4-[3-(trifluoromethyl)phenyl]but-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid~~ 4-[[2-((4S)-4-((1E,3S)-3-hydroxy-4-[3-(trifluoromethyl)phenyl]but-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid,
- (9) ~~4-[2-((4S)-4-((1E,3S)-4-(4-fluoro-3-methylphenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid~~ 4-[2-((4S)-4-((1E,3S)-4-(4-fluoro-3-methylphenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid,
- (10) ~~4-[[2-((4S)-4-((1E,3S)-4-(3-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid~~ 4-[[2-((4S)-4-((1E,3S)-4-(3-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid,
- (11) ~~4-[[2-((4S)-4-((1E,3S)-4-(3-chloro-4-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid~~ 4-[[2-((4S)-4-((1E,3S)-4-(3-chloro-4-fluorophenyl)-3-hydroxybut-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid,
- (12) ~~4-[[2-((4S)-4-((1E,3S)-3-hydroxy-4-[3-(methoxymethyl)phenyl]but-1-enyl]-2-oxo-1,3-thiazolidine-3-yl)ethyl)sulfanyl]butanoic acid,~~
- (13) ~~7-((2R)-2-[(1E,3S)-4-(4-fluorophenyl)-3-hydroxybut-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-[(1E,3S)-4-(4-fluorophenyl)-3-hydroxybut-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (14) ~~7-((2R)-2-[(1E,3S)-4-(3,5-difluorophenyl)-3-hydroxybut-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-[(1E,3S)-4-(3,5-difluorophenyl)-3-hydroxybut-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid,

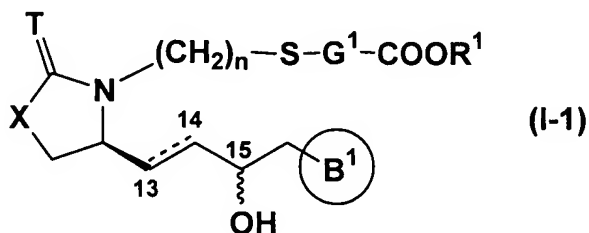
- (15) ~~7-((2R)-2-((1E,3S)-4-[4-fluoro-3-(trifluoromethyl)phenyl]-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-4-[4-fluoro-3-(trifluoromethyl)phenyl]-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (16) ~~7-((2R)-2-((1E,3S)-4-(4-fluoro-3-methylphenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-4-(4-fluoro-3-methylphenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (17) ~~7-((2R)-2-((1E,3S)-4-(3-ethyl-4-fluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-4-(3-ethyl-4-fluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (18) ~~7-((2R)-2-((1E,3S)-3-hydroxy-4-[3-(trifluoromethyl)phenyl]but-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-3-hydroxy-4-[3-(trifluoromethyl)phenyl]but-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (19) ~~7-((2R)-2-((1E,3S)-4-(3-fluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-4-(3-fluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,
- (20) ~~7-((2R)-2-((1E,3S)-3-hydroxy-4-phenylbut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,~~
- (21) ~~7-((2R)-2-((1E,3S)-4-(3,4-difluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-((1E,3S)-4-(3,4-difluorophenyl)-3-hydroxybut-1-enyl)-5-thioxopyrrolidine-1-yl)heptanoic acid,

(22) ~~7-((2R)-2-[(1E,3S)-4-(3-chloro-4-fluorophenyl)-3-hydroxybut-1-enyl]-5-~~
~~thioxipyrrolidine-1-yl)heptanoic acid~~ 7-((2R)-2-[(1E,3S)-4-(3-chloro-4-fluorophenyl)-3-
hydroxybut-1-enyl]-5-thioxipyrrolidine-1-yl)heptanoic acid,

(23) 7-((2R)-2-[(1E,3S)-4-(3-ethylphenyl)-3-hydroxybut-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid,

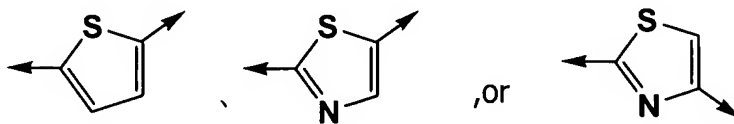
(24) 7-((2R)-2-[(1E,3S)-3-hydroxy-4-(3-propylphenyl)but-1-enyl]-5-thioxopyrrolidine-1-yl)heptanoic acid.

3. (currently amended): The compound according to claim 1, which is represented by formula (I-1):



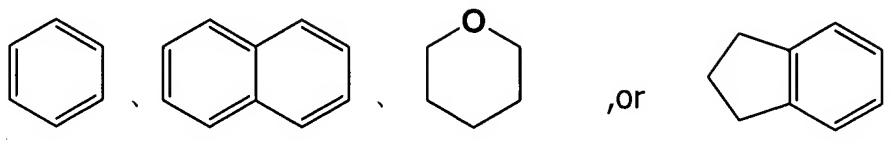
wherein G^1 is ring A^1 or C1-4 alkylene,

ring A^1 is



wherein left-pointing arrow represents binding to S, and right-pointing arrow represents binding to $COOR^1$,

ring B^1 is C3-7 cycloalkyl,



ringB¹ may be substituted with a halogen atom, C1-4 alkyl, phenyl, methoxymethyl, ~~trifluoromethyl~~ trifluoromethyl and/or ~~trifluoromethoxy~~ trifluoromethoxy,

other symbols have the same meanings as described in claim 1, and

wherein when T is oxygen, X is -CH₂-, and

when n is an integer of 2-4, G¹ is ringA¹.

4. (currently amended): The compound according to claim 3, which is selected from the group consisting of:

- (1) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-phenylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (2) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-ethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (3) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (4) (15 α ,13E)-9-oxo-15-hydroxy-16-(naphthalene-2-yl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

- (5) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (6) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (7) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-methylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-methylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (8) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3,5-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3,5-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (9) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (10) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-trifluoromethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-trifluoromethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,
- (11) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(12) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3,4-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3,4-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(13) (15 α ,13E)-9-oxo-15-hydroxy-16-phenyl-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(14) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-propylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(15) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-methoxymethylphenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(16) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-ethyl-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-ethyl-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-aza-10-oxaprost-13-enoic acid,

(17) (15 α ,13E)-9-oxo-15-hydroxy-16-phenyl-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene,

(18) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-methylphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene,

(19) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene,

- (20) (15 α ,13E)-9-oxo-15-hydroxy-16-(naphthalene-2-yl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene,
- (21) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-phenylphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-aza-10-oxaprost-13-ene,
- (22) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-phenylphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (23) (15 α ,13E)-9-oxo-15-hydroxy-16-(naphthalene-2-yl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (24) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (25) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-ethylphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (26) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-methylphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (27) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-5-(5-carboxythiophene-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(28) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluoro-3-phenylphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(29) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-ethylphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(30) (15 α ,13E)-9-oxo-15-hydroxy-16-(naphthalene-2-yl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(31) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(32) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

(33) (15 α ,13E)-9-oxo-15-hydroxy-16-cyclopropyl-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

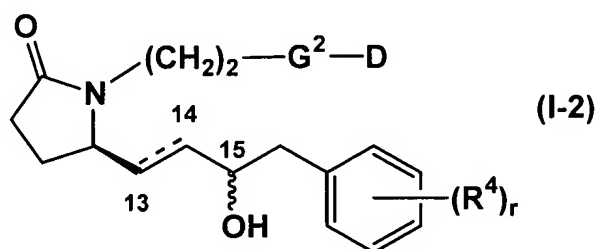
(34) (15 α ,13E)-9-oxo-15-hydroxy-16-cyclohexyl-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,

- (35) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-5-(5-carboxythiazol-2-yl)-~~
~~1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-
fluorophenyl)-5-(5-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (36) (15 α ,13E)-9-oxo-15-hydroxy-16-cyclobutyl-5-(4-carboxythiazol-2-yl)-
1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (37) (15 α ,13E)-9-oxo-15-hydroxy-16-(4-chlorophenyl)-5-(4-carboxythiazol-2-yl)-
1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (38) (15 α ,13E)-9-oxo-15-hydroxy-16-cycloheptyl-5-(4-carboxythiazol-2-yl)-
1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (39) (15 α ,13E)-9-oxo-15-hydroxy-16-(indane-2-yl)-5-(4-carboxythiazol-2-yl)-
1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (40) (15 α ,13E)-9-oxo-15-hydroxy-16-(tetrahydropyran-4-yl)-5-(4-carboxythiazol-2-yl)-
1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (41) (15 α ,13E)-9-oxo-15-hydroxy-16-(7-methylnaphthalene-2-yl)-5-(4-carboxythiazol-2-
yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (42) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-tetranol-5,10-dithia-~~
~~8-azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-
tetranol-5,10-dithia-8-azaprost-13-enoic acid,
- (43) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-tetranol-6-thia-8-~~
~~azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-tetranol-
6-thia-8-azaprost-13-enoic acid,

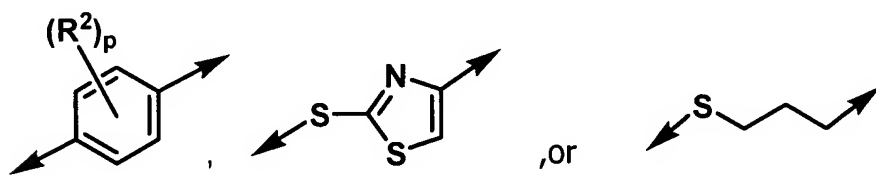
(44) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-methylphenyl)-17,18,19,20-tetranol-6-thia-8-azaprost-13-enoic acid, and

(45) ~~(15 α ,13E)-9-thioxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid~~ (15 α ,13E)-9-thioxo-15-hydroxy-16-(4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid.

5. (currently amended): The compound according to claim 1, which is represented by formula (I-2):



wherein G² is



wherein left-pointing arrow represents binding to -(CH₂)₂-, and right-pointing arrow represents binding to D,

R⁴ is (1) a halogen atom, (2) C1-4 alkyl, (3) C1-4 alkoxy, (4) C1-4 alkyl optionally substituted with 1-5 of halogen atom(s), (5) C1-4 alkoxy optionally substituted with 1-5 of halogen atom(s), (6) phenyl or (7) 3- to 15- membered mono-, bi- or tri-heterocyclic aryl

containing 1 to 4 hetero atom(s) selected from the group consisting of oxygen, nitrogen and sulfur atom(s) which may be partially or fully saturated, and (6) phenyl or (7) heterocyclic in the R⁴ may be substituted with 1-3 of (a) a halogen atom(s), (b) C1-4 alkyl, (c) C1-4 alkoxy and/or (d) nitro,

r is an integer 1 to 5, and

other symbols have the same meanings as described in claim 1.

6. (currently amended): The compound according to claim 5, which is selected from the group consisting of:

- (1) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3,5-dimethylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (2) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-(benzothiazol-2-yl)phenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (3) ~~(15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid~~ (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (4) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(5-methylbenzothiazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (5) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-(5-methylbenzoxazol-2-yl)phenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,

- (6) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(6-methylbenzoxazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (7) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-(6-methylbenzoxazol-2-yl)phenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (8) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-(4-methylbenzothiazol-2-yl)phenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (9) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(4-methylbenzothiazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (10) ~~(15 α ,13E)-1,6-(2-fluoro-1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid~~ (15 α ,13E)-1,6-(2-fluoro-1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (11) (15 α ,13E)-1,6-(3-methyl-1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (12) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(5,7-dimethylbenzoxazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (13) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(5-chlorobenzothiazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (14) (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-(5-chlorobenzothiazol-2-yl)phenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,

- (15) (15 α)-9-oxo-15-hydroxy-16-(3-(2,4-dimethylphenyl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (16) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(3,4-dimethylphenyl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (17) ~~(15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3,4-difluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid~~ (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3,4-difluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (18) (15 α ,13E)-1,6-(2-methyl-1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (19) (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(5-chlorobenzoxazol-2-yl)phenyl)-5-(4-carboxythiazol-2-yl)-1,2,3,4,17,18,19,20-octanol-5-thia-8-azaprost-13-ene,
- (20) ~~(15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methyl-4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid~~ (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methyl-4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (21) ~~(15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid~~ (15 α ,13E)-1,6-(1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-chloro-4-fluorophenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,
- (22) (15 α ,13E)-1,6-(3-methoxy-1,4-interphenylene)-9-oxo-15-hydroxy-16-(3-methylphenyl)-2,3,4,5,17,18,19,20-octanol-8-azaprost-13-enoic acid,

(23) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-trifluoromethoxyphenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid,

(24) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3,5-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3,5-difluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid,

(25) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-(phenyl)phenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid,~~

(26) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-(4-fluorophenyl)phenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-(4-fluorophenyl)phenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid, and

(27) ~~(15 α ,13E)-9-oxo-15-hydroxy-16-(3-phenyl-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid~~ (15 α ,13E)-9-oxo-15-hydroxy-16-(3-phenyl-4-fluorophenyl)-17,18,19,20-tetranol-5-thia-8-azaprost-13-enoic acid.

7. (previously presented): A pharmaceutical composition comprising the compound represented by formula (I) according to claim 1, a salt thereof, a solvate thereof, a cyclodextrin clathrate thereof, or a prodrug thereof, and a pharmaceutically acceptable carrier.

8. (canceled).

9. (withdrawn): A method for preventing and/or treating EP4-mediated disease, which comprises administering to a mammal an effective amount of the compound represented by formula (I) according to claim 1, a salt thereof, a solvate thereof or a cyclodextrin clathrate thereof, or a prodrug thereof.

10. (canceled).

11. (new): The compound according to claim 1, wherein n is 1 or 2.